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<110> Memorial Sloan-Kettering Cancer Center
       Kolesnick, Richard N.
       Xing, Hong-Mei R.

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TUMORIGENESIS

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<141> 2004-11-30

<150> PCT/US03/16961
<151> 2003-05-29

<150> 60/384,228
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Tyr Ile Cys Lys Gln Gln Gln Ser Lys Leu Ser Val Thr Pro Ser Asp
                85   90   95

Arg Thr Ala Glu Leu Asn Ser Tyr Pro Arg Phe Ser Asp Trp Leu Tyr
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Val His Arg Gly Arg Trp His Gly Glu Val Ala Ile Arg Leu Leu Glu
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Met Asp Gly His Asn Gln Asp His Leu Lys Leu Phe Lys Lys Glu Val
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Ile Asn Lys Thr Arg Gln Ile Ala Gln Glu Ile Ile Lys Gly Met Gly
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Tyr Leu His Ala Lys Gly Ile Val His Lys Asp Leu Lys Ser Lys Asn
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Met Ile Pro Gly Arg Asp Glu Asp Gln Leu Pro Phe Ser Lys Ala Ala
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Asp Val Tyr Ala Phe Gly Thr Val Trp Tyr Glu Leu Gln Ala Arg Asp
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Ser Gly Glu Gly Val Arg Arg Val Leu Ala Ser Val Ser Leu Gly Lys
785   790   795   800

Glu Val Gly Glu Ile Leu Ser Ala Cys Trp Ala Phe Asp Leu Gln Glu
              805   810   815

Arg Pro Ser Phe Ser Leu Leu Met Asp Met Leu Glu Arg Leu Pro Lys
              820   825   830

Leu Asn Arg Arg Leu Ser His Pro Gly His Phe Trp Lys Ser Ala Asp
              835   840   845

Ile Asn Ser Ser Lys Val Met Pro Arg Phe Glu Arg Phe Gly Leu Gly
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        35   40   45

Thr Lys Cys Ala Val Ser Asn Asp Leu Thr Gln Gln Glu Ile Arg Thr
    50   55   60

Leu Glu Ala Lys Leu Val Arg Tyr Ile Cys Lys Gln Arg Gln Cys Lys
65   70   75   80

Leu Ser Val Ala Pro Gly Glu Arg Thr Pro Glu Leu Asn Ser Tyr Pro
            85   90   95

Arg Phe Ser Asp Trp Leu Tyr Thr Phe Asn Val Arg Pro Glu Val Val
            100   105   110

Gln Glu Ile Pro Arg Asp Leu Thr Leu Asp Ala Leu Leu Glu Met Asn
        115   120   125

Glu Ala Lys Val Lys Glu Thr Leu Arg Arg Cys Gly Ala Ser Gly Asp
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Glu Cys Gly Arg Leu Gln Tyr Ala Leu Thr Cys Leu Arg Lys Val Thr
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Gly Leu Gly Gly Glu His Lys Glu Asp Ser Ser Trp Ser Ser Leu Asp
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Ser Asp Ser Pro Thr Pro Ser Phe Ser Glu Gly Leu Ser Asp Thr Cys
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Ile Pro Leu His Ala Ser Gly Arg Leu Thr Pro Arg Ala Leu His Ser
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Phe Ile Thr Pro Pro Thr Thr Pro Gln Leu Arg Arg His Thr Lys Leu
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Lys Pro Pro Arg Thr Pro Pro Pro Ser Arg Lys Val Phe Gln Leu
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Leu Pro Ser Phe Pro Thr Leu Thr Arg Arg Lys Ser His Glu Ser Gln
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Leu Gly Asn Arg Ile Asp Asp Val Ser Ser Met Arg Phe Asp Leu Ser
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His Gly Ser Pro Gln Met Val Arg Arg Asp Ile Gly Leu Ser Val Thr
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His Arg Phe Ser Thr Lys Ser Trp Leu Ser Gln Val Cys His Val Cys
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Gln Lys Ser Met Ile Phe Gly Val Lys Cys Lys His Cys Arg Leu Lys
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Cys His Asn Lys Cys Thr Lys Glu Ala Pro Ala Cys Arg Ile Ser Phe
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Leu Pro Leu Thr Arg Leu Arg Arg Thr Glu Ser Val Pro Ser Asp Ile
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Asn Asn Pro Val Asp Arg Ala Ala Glu Pro His Phe Gly Thr Leu Pro
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Ala Pro Phe Pro Thr Ser Ser Asn Pro Ser Ser Ala Thr Thr Pro Pro
    450             455             460

Asn Pro Ser Pro Gly Gln Arg Asp Ser Arg Phe Asn Phe Pro Ala Ala
465             470             475             480

Tyr Phe Ile His His Arg Gln Gln Phe Ile Phe Pro Asp Ile Ser Ala
            485             490             495

Phe Ala His Ala Ala Pro Leu Pro Glu Ala Ala Asp Gly Thr Arg Leu
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Asp Asp Gln Pro Lys Ala Asp Val Leu Glu Ala His Glu Ala Glu Ala
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Arg Lys Ala Ser Gln Thr Ser Val Tyr Leu Gln Glu Trp Asp Ile Pro
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Phe Glu Gln Val Glu Leu Gly Glu Pro Ile Gly Gln Gly Arg Trp Gly
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Arg Val His Arg Gly Arg Trp His Gly Glu Val Ala Ile Arg Leu Leu
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Glu Met Asp Gly His Asn Gln Asp His Leu Lys Leu Phe Lys Lys Glu
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Val Met Asn Tyr Arg Gln Thr Arg His Glu Asn Val Val Leu Phe Met
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        675             680             685

Gly Tyr Leu His Ala Lys Gly Ile Val His Lys Asp Leu Lys Ser Lys
    690             695             700

Asn Val Phe Tyr Asp Asn Gly Lys Val Val Ile Thr Asp Phe Gly Leu
705             710             715             720

Phe Gly Ile Ser Gly Val Val Arg Glu Gly Arg Arg Glu Asn Gln Leu
            725             730             735

Lys Leu Ser His Asp Trp Leu Cys Tyr Leu Ala Pro Glu Ile Val Arg
        740             745             750

Glu Met Thr Pro Gly Lys Asp Glu Asp Gln Leu Pro Phe Ser Lys Ala
        755             760             765

Ala Asp Val Tyr Ala Phe Gly Thr Val Trp Tyr Glu Leu Gln Ala Arg
    770             775             780

Asp Trp Pro Leu Lys Asn Gln Ala Ala Glu Ala Ser Ile Trp Gln Ile
785             790             795             800

Gly Ser Gly Glu Gly Met Lys Arg Val Leu Thr Ser Val Ser Leu Gly
            805             810             815

Lys Glu Val Ser Glu Ile Leu Ser Ala Cys Trp Ala Phe Asp Leu Gln
        820             825             830

Glu Arg Pro Ser Phe Ser Leu Leu Met Asp Met Leu Glu Lys Leu Pro
        835             840             845

Lys Leu Asn Arg Arg Leu Ser His Pro Gly His Phe Trp Lys Ser Ala
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